## CALIFORNIA REGIONAL WATER QUALITY CONTROL REGIONAL BOARD CENTRAL VALLEY REGION

#### ORDER NO.

#### WASTE DISCHARGE REQUIREMENTS

#### FOR JAMES H. WHEELER AND EIE LAMBDA, LLC BRIDGES ON THE RIVER RESTAURANT SACRAMENTO COUNTY

The California Regional Water Quality Control Regional Board, Central Valley Region, (hereafter Regional Board) finds that:

- 1. On 17 June 2004, James H. Wheeler submitted a Report of Waste Discharge (RWD) for a wastewater treatment facility to treat and dispose of domestic wastewater generated at the proposed Bridges on the River Restaurant in Sacramento. Additional information was received from the Discharger on 29 June, 17 August, 9 September, 10 November, and 7 December 2004, and on 28 March 2005.
- 2. The restaurant and associated wastewater treatment facility (WWTF), which are owned by James H. Wheeler are at 2125 Garden Highway, Sacramento in Section 28, T9N, R4E, MDB&M. The land, which is owned by EIE Lambda, LLC, is on Assessor's Parcel No. 274-0220-024. James H. Wheeler and EIE Lambda, LLC are hereafter known as "Discharger".
- 3. Surrounding land uses are residential, commercial, and agricultural. The facility site location is shown on Attachment A, which is attached hereto and made part of this Order by reference.

#### **Proposed Facility and Discharge**

- 4. The restaurant will operate year-round, and will seat up to 300 customers during the dinner service, when approximately 20 employees will be working. Lunch service patronage is expected to be approximately 150 customers, who will be served by nine employees.
- 5. Domestic wastewater from the restrooms, janitorial, and kitchen facilities will be discharged to an on-site gravity sewer system that will convey the wastewater to an existing 1,200-gallon septic tank. A new 4,000-gallon septic tank will act as an aerated equalization tank, from which wastewater will be pumped to a prefabricated wastewater treatment system (package plant). Kitchen wastewater will flow through a grease trap before entering the equalization tank. A site plan is depicted on Attachment B, which is attached hereto and made part of this Order by reference.
- 6. The package plant will provide secondary aerobic treatment, clarification, and ozone disinfection by batch sequencing. Disinfected effluent will be further treated by pressure filtration through sand and carbon filters and reverse osmosis prior to discharge to either of two shallow groundwater injection wells. Inadequately treated wastewater will be automatically returned to the equalization tank.
- 7. The package plant will include a system of liquid level alarm lights to alert the operator of operational problems. The reverse osmosis unit will provide continuous electrical conductivity monitoring, and alarm lights linked to the conductivity meter will alert the operator of seal failure.

- 8. The package plant is designed to treat up to 5,000 gallons per day (gpd) in 350-gallon batches every 100 minutes. A batch counter will measure influent and effluent flows. The reverse osmosis system can treat up to 6,800 gpd at 98 percent efficiency (98 percent TDS reduction).
- 9. Biosolids will be pumped from the clarifier back to the aeration chamber several times per day. Approximately once every five years, biosolids will be pumped and taken off-site for disposal at a landfill or permitted land application site. Reverse osmosis reject brine will be temporarily stored on-site in a tank and periodically disposed of off-site. Two 10-inch diameter injection wells screened from 35 to 55 feet below ground surface (bgs) near the package plant will provide an estimated maximum disposal capacity of 7,900 gpd.
- 10. The Discharger will contract with a certified wastewater treatment plant operator to perform routine operation, maintenance, and monitoring of the wastewater treatment and disposal system.
- 11. Influent flows to the treatment system will vary, with peak flows of 3,250 gpd during the 4.5-hour dinner service. Total daily influent flows are estimated to be no more than 5,000 gpd.
- 12. Based on the RWD, overall influent wastewater character is expected to be similar to typical restaurant wastewater, with a BOD of 100 to 400 mg/L and a total nitrogen concentration of 20 to 85 mg/L.
- 13. Water for the restaurant will be supplied by an on-site well approximately 220 feet from the wastewater injection wells. Depth and construction information for the supply well were not included in the RWD. Based on a single sample obtained from the supply well in May 2004, the water supply is characterized as follows.

Constituent/Parameter	Analytical Result	Water Quality Limit <sup>1</sup>	
Calcium, mg/L	22.6	none	
Magnesium, mg/L	19.4	none	
Potassium, mg/L	1.62	none	
Sodium, mg/L	38.8	69	
Chloride, mg/L	10.8	106	
Fluoride, mg/L	< 0.10	1	
Nitrate as NO <sub>3</sub> , mg/L	< 0.050	45	
Sulfate, mg/L	15.3	250	
рН	7.8	6.5 to 8.4	
Total Alkalinity, mg/L	226	none	
Hardness, mg/L	133	none	
Electrical conductivity, umhos/cm	331	700	

Constituent/Parameter	Analytical	Water Quality
	Result	Limit 1
Total dissolved solids	267	450

Water quality limit translated from narrative water quality objectives specified in the Basin Plan for protection of the beneficial uses of groundwater.

These data indicate that the facility water supply is of good to excellent quality.

#### **Site-Specific Conditions**

- 14. The facility site is on the north bank of the Sacramento River approximately 2.5 miles upstream of the confluence of the American and Sacramento Rivers. The site is within the Sacramento River Hydrologic Subarea No. 519.22, as depicted on interagency hydrologic maps prepared by the Department of Water Resources in August 1986.
- 15. The facility site is on the river side of the flood protection levee, and portions of the site (excluding the restaurant itself) are within the 100-year floodplain. The proposed wastewater treatment plant and injection wells are not within the 100-year floodplain.
- 16. The 1.52-acre site includes an extended driveway that slopes from the crest of the levee (elevation approximately 43 feet MSL) to a gently sloped overbank area (elevation approximately 32 feet MSL).
- 17. Based on the RWD, shallow soils near the proposed injection wells consist of approximately 15 feet of silty sand fill underlain by at least 12 feet of silty clay and fine sand.

#### **Groundwater Considerations**

- 18. Shallow groundwater at the site occurs at approximately 18 feet MSL (approximately 15 feet bgs), and is hydraulically connected to the adjacent Sacramento River. As such, the groundwater depth and gradient (both direction and magnitude) will change with the river level. During the dry season, groundwater will generally be deeper and flow southeast towards the river. During the rainy season, groundwater should be shallower, with flows generally toward the northeast.
- 19. The Discharger performed limited analyses of one groundwater sample in September 2004, and subsequently installed three shallow groundwater monitoring wells near the proposed wastewater treatment plant in January 2005. Analytical data for the September 2004 sample and a single monitoring well sampling event in January 2005 are summarized in the following table. These data serve as a pre-discharge baseline for groundwater quality within the proposed wastewater injection zone.

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### Analytical Result (mg/L except as noted)

	September 2004		January 2005		Water	
Constituent/Parameter	Open Boring	MW-1	MW-2	MW-3	Water Quality Limit <sup>1</sup>	
Total coliform (MPN/100mL)	>23	<1600	900	<1600	<2.2	
Fecal coliform (MPN/100mL)	>23	<2	<2	30		
E. coli (MPN/100mL)		<2	<2	17		
pН	8.1	7.9	7.6	7.6	6.5 to 8.4	
Total dissolved solids	554	147	157	135	450	
Nitrate as N	0.67	< 0.012	< 0.012	0.380	10	
Nitrite as N	< 0.2	< 0.015	< 0.015	< 0.015	none	
Ammonia		< 0.050	< 0.050	< 0.050	1.5	
Total Kjeldahl nitrogen	8.66	1.40	1.50	1.50	none	
Alkalinity as CaCO <sub>3</sub>	380	104	116	92	none	
Hardness	250	57.6	90.0	78.8	none	
Aluminum (ug/L)		863	1,280	1,350	200	
Arsenic (ug/L)		<80	<80	<80	0.004	
Barium (ug/L)		<100	<100	<100	1,000	
Boron (ug/L)		121	132	<100	700	
Cadmium (ug/L)		<5	<5	<5	0.07	
Copper (ug/L)		< 200	< 200	<200	170	
Iron (ug/L)		1,420	2,340	2,560	300	
Lead (ug/L)		10	10	10	2	
Manganese (ug/L)		157	448	397	50	
Mercury (ug/L)		< 0.2	< 0.2	< 0.2	1.2	
Nickel (ug/L)		<40	<40	<40	12	
Zinc (ug/L)		<15	<15	<15	2,000	
Magnesium	40	8.10	14.5	12.4	none	
Potassium	2.3	1.98	1.89	1.51	none	
Sodium	120	27.6	23.6	14.4	69	
Calcium	33	9.67	12.1	11.1	none	
Chloride	9.88	7.06	10.0	8.61	106	

#### Analytical Result (mg/L except as noted)

	September 2004	January 2005			Water	
Constituent/Parameter	Open Boring	MW-1	MW-2	MW-3	Quality Limit <sup>1</sup>	
Fluoride	<1	< 0.10	< 0.10	< 0.10	none	
Sulfate	32.6	7.59	11.3	9.81	250	
Orthophosphate		< 0.20	< 0.20	< 0.20	none	
Bromide		< 0.10	< 0.10	< 0.10	none	

Water quality limit translated from narrative water quality objectives specified in the Basin Plan for protection of the beneficial uses of groundwater.

These data indicate strong seasonal variability in groundwater quality, with higher groundwater quality during the rainy season, when the river level is higher.

#### **Basin Plan and Beneficial Uses**

- 20. The *Water Quality Control Plan for the Sacramento River and San Joaquin River Basins, Fourth Edition*, (hereafter Basin Plan) designates beneficial uses, establishes water quality objectives, contains implementation plans and policies for protecting waters of the basin, and incorporates by reference plans and policies adopted by the State Board. Pursuant to Section 13263(a) of the California Water Code, waste discharge requirements must implement the Basin Plan.
- 21. Surface water drainage is to the Sacramento River. The designated beneficial uses of the Sacramento River are municipal and domestic supply; agricultural supply; water contact recreation; non-contact water recreation; warm freshwater habitat; cold freshwater habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; wildlife habitat; and navigation.
- 22. The designated beneficial uses of the underlying groundwater are municipal and domestic supply, agricultural supply, industrial service supply, and industrial process supply.
- 23. The Basin Plan establishes numerical and narrative water quality objectives for surface water and groundwater within the basin. Numerical water quality objectives are maximum limits directly applicable to the protection of designated beneficial uses of the water. The Basin Plan requires that the Regional Board, on a case-by-case basis, follow specified procedures to determine maximum numerical limitations that apply the narrative objectives when it adopts waste discharge requirements.
- 24. The Basin Plan includes a water quality objective for Chemical Constituents that, at a minimum, requires waters designated as domestic or municipal supply to meet the maximum contaminant

levels (MCLs) specified in the following provisions of Title 22, California Code of Regulations: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section 64444, Table 64449-A (Secondary Maximum Contaminant Levels-Consumer Acceptance Limits) of Section 64449, and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. The Basin Plan's incorporation of these provisions by reference is prospective, and includes future changes to the incorporated provisions as the changes take effect. The Basin Plan recognizes that that the Regional Board may apply limits more stringent than MCLs to ensure that waters do not contain chemical constituents in concentrations that adversely affect beneficial uses.

25. The Basin Plan contains narrative water quality objectives for Chemical Constituents, Tastes and Odors, and Toxicity. The Toxicity Objective, in summary, requires that groundwater be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life associated with designated beneficial uses. The Chemical Constituents objective requires that groundwater "shall not contain chemical constituents in concentrations that adversely affect beneficial uses". The Tastes and Odors objective requires that groundwater "shall not contain taste- or odor-producing substances in concentrations that cause nuisance or adversely affect beneficial uses". Chapter IV, Implementation, of the Basin Plan contains the "Policy for Application of Water Quality Objectives". This Policy specifies, in part, that compliance with narrative water quality objectives may be evaluated considering numerical criteria and guidelines developed and/or published by other agencies and organizations.

#### **Groundwater Degradation**

- 26. State Water Resources Control Board (State Board) Resolution No. 68-16 ("Policy with Respect to Maintaining High Quality Waters of the State") (hereafter Resolution No. 68-16) requires a regional board in regulating the discharge of waste to maintain high quality waters of the state (i.e., background water quality) until it is demonstrated that any change in quality will be consistent with maximum benefit to the people of the State, will not unreasonably affect beneficial uses, and will not result in water quality less than as described in plans and policies. The discharge is required to meet waste discharge requirements that will result in the best practicable treatment or control of the discharge necessary to assure that pollution or nuisance will not occur and highest water quality consistent with maximum benefit to the people will be maintained.
- 27. The Regional Board has considered antidegradation pursuant to State Board Resolution No. 68-16, and finds that the Discharger has not provided the required demonstration to be allowed to cause groundwater degradation, and therefore none is authorized.
- 28. The WWTF will provide treatment and control of the discharge that incorporates:
  - a. Complete wastewater containment during treatment;
  - b. Secondary treatment;
  - c. Disinfection by ozonation to tertiary disinfection standards;

- d. Filtration;
- e. Reverse osmosis; and
- f. A certified wastewater treatment plant operator to assure proper operation and maintenance.
- 29. The WWTF will be equipped with liquid level alarm lights and a pipe to direct excess wastewater back to the equalization tank in the event of a pump or power failure. However, the system will operate 24 hours per day and the certified operator will not be on-site at all times to observe the alarm lights. The system has no backup power supply or auto dialer system, and there is no method to return inadequately filtered effluent to the reverse osmosis unit. This lack of system redundancy could lead to discharge of inadequately treated wastewater to the ground surface and/or groundwater, thus posing a potential threat to groundwater and the restaurant water supply. Therefore, it is appropriate to require that the Discharger submit a specific plan for design modifications to ensure adequate containment and prevent discharges of inadequately treated effluent to the injection wells.
- 30. The wastewater treatment and disposal system is complex and will be constructed from unit process equipment obtained from more than one manufacturer. Therefore, it is appropriate to require that the Discharger submit a detailed Operation and Maintenance Manual to ensure that the operator understands the appropriate inspection, monitoring, and maintenance protocols. Additionally, operation, maintenance, and monitoring are expected to be costly relative to other similar-sized systems. It is therefore appropriate to require that the Discharger submit a detailed cost estimate for operation, maintenance, and monitoring to ensure that the Discharger fully understands this obligation.
- 31. The WWTF utilizes direct shallow aquifer injection as the sole means of wastewater disposal. Although reverse osmosis treatment should remove the majority of the dissolved constituents, bacteria, and viruses remaining in the disinfected effluent, groundwater quality protection relies on the integrity of the reverse osmosis unit seals. Because of the proximity of the injection wells to the restaurant's potable water supply well, the discharge may pose a threat to a public water supply. Therefore, it is appropriate to require frequent treatment system and effluent monitoring, as well as water supply and shallow groundwater monitoring to ensure that best practicable treatment and control (BPTC) and the highest water quality consistent with the maximum benefit to the people of the State will be achieved.
- 32. The WWTF utilizes direct shallow aquifer injection as the sole means of treated wastewater disposal. Therefore, it is appropriate to establish effluent limitations that will ensure optimal operation of the WWTF. Derivation of these limitations is presented in the Information Sheet.

#### Other

33. State regulations that prescribe procedures for detecting and characterizing the impact of waste constituents from waste management units on groundwater are found in Title 27. While the wastewater treatment facility is exempt from Title 27, the data analysis methods of Title 27 may be

- appropriate for determining whether the discharge complies with the terms for protection of groundwater specified in this Order.
- 34. The California Department of Health Services (DHS) has established statewide water reclamation criteria in Title 22, CCR, Section 60301 et. seq. (hereafter Title 22), and has drafted proposed regulations for aquifer storage and reuse. The existing Title 22 regulations are not applicable to the proposed discharge, and the Regional Board cannot enforce aquifer storage and reuse regulations that have not yet been promulgated. DHS was consulted about the discharge and expressed concern that, despite the high level of treatment, the shallow injection wells may pose a threat to the restaurant's water supply, which is regulated as a small community water system by DHS and the County of Sacramento. DHS recommended that the system be equipped with sufficient fail-safe systems, and that the Discharger be required to monitor the treated effluent for virus surrogates (MS-2 coliphage). The Sacramento County Environment Management Department was informed of DHS' recommendations and agreed to work with Regional Board staff to ensure that the discharge does not pose a health threat to restaurant patrons and employees.
- 35. The California Department of Water Resources sets standards for the construction and destruction of groundwater wells, as described in *California Well Standards Bulletin 74-90* (June 1991) and *Water Well Standards: State of California Bulletin 94-81* (December 1981). These standards, and any more stringent standards adopted by the State or county pursuant to CWC Section 13801, apply to all monitoring wells.
- 36. On 9 October 1996, in accordance with the California Environmental Quality Act (CCR, Title 14, Section 15261 et. seq.), the Sacramento County Board of Supervisors certified a Negative Declaration and approved a Use Permit for the restaurant project.
- 37. On 16 April 2004, the State Reclamation Board issued Permit No. 16837-R-2 GM to allow construction of the WWTF and groundwater injection wells on the waterside of the levee. Special Condition No. 31 of the permit states:
  - "When public sewers become available landside of the levee, the permittee will apply for a permit from the Board to relocate and connect the sewage lateral to a through levee crossing and abandon the injection wells and treatment plant located on the waterside of the levee."
- 38. The State Board adopted Order No. 97-03-DWQ (General Permit No. CAS000001) specifying waste discharge requirements for discharges of storm water associated with industrial activities, and requiring submittal of a Notice of Intent by all affected industrial dischargers. The Dischargers' facility is exempt from those requirements, and is therefore not required to obtain coverage under General Permit No. CAS000001.
- 39. Section 13267(b) of the California Water Code provides that: "In conducting an investigation specified in subdivision (a), the regional board may require that any person who has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge waste within its region, or any citizen or domiciliary, or political agency or entity of this state who

has discharged, discharges, or is suspected of having discharged or discharging, or who proposes to discharge, waste outside of its region that could affect the quality of waters within its region shall furnish, under penalty of perjury, technical or monitoring program reports which the regional board requires. The burden, including costs, of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. In requiring those reports, the regional board shall provide the person with a written explanation with regard to the need for the reports, and shall identify the evidence that supports requiring that person to provide the reports".

The technical reports required by this Order and the attached "Monitoring and Reporting Program No. \_\_" are necessary to assure compliance with these waste discharge requirements. The Discharger operates the facility that discharges the waste subject to this Order.

- 40. This discharge is exempt from the requirements of *Consolidated Regulations for Treatment*, *Storage, Processing, or Disposal of Solid Waste*, as set forth in Title 27, CCR, Division 2, Subdivision 1, Section 20005, et seq., (hereafter Title 27). The exemption pursuant to Section 20090(a), is based on the following:
  - a. The waste consists primarily of domestic sewage;
  - b. The waste discharge requirements are consistent with water quality objectives, and
  - c. The treatment and storage facilities described herein are associated with a domestic wastewater treatment facility.
- 41. Pursuant to California Water Code Section 13263(g), discharge is a privilege, not a right, and adoption of this Order does not create a vested right to continue the discharge.

#### **Public Notice**

- 42. All the above and the supplemental information and details in the attached Information Sheet, which is incorporated by reference herein, were considered in establishing the following conditions of discharge.
- 43. The Discharger and interested agencies and persons have been notified of the intent to prescribe waste discharge requirements for this discharge, and they have been provided an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
- 44. All comments pertaining to the discharge were heard and considered in a public meeting.

**IT IS HEREBY ORDERED** that, pursuant to Sections 13263 and 13267 of the California Water Code, James H. Wheeler and EIE Lambda, LLC, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

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[Note: Other prohibitions, conditions, definitions, and some methods of determining compliance are contained in the attached "Standard Provisions and Reporting Requirements for Waste Discharge Requirements" dated 1 March 1991.]

#### A. Discharge Prohibitions

- 1. Discharge of waste to the injection wells is prohibited unless and until the Executive Officer expressly approves in writing the technical reports required pursuant to Provisions G.1.a, G.1.b, G.1.c, and G.1.d of this Order.
- 2. Discharge of waste to surface waters or surface water drainage courses is prohibited.
- 3. Bypass or overflow of untreated or partially treated waste is prohibited.
- 4. Discharge of waste classified as 'hazardous' under Section 2521, Chapter 15 of Title 23 or 'designated', as defined in Section 13173 of California Water Code is prohibited.
- 5. Discharge of wastewater in a manner different than described in Finding Nos. 5 through 9 is prohibited.
- 6. Surfacing of wastewater from the injection wells or wastewater storage tanks is prohibited.

#### **B.** Discharge Specifications

- 1. The daily influent flow to the package plant shall not exceed 5,000 gpd.
- 2. The Discharger shall operate all systems and equipment to maximize treatment of wastewater and optimize the quality of the discharge.
- 3. The conveyance, treatment, and disposal systems shall have sufficient capacity to accommodate actual wastewater flows at all times.
- 4. Wastewater storage and disposal shall not cause pollution or a nuisance as defined by Section 13050 of the California Water Code (CWC).
- 5. Public contact with wastewater shall be precluded or controlled through such means as fences and signs, or acceptable alternatives.
- 6. No waste constituent shall be released or discharged, or placed where it will be released or discharged, in a concentration or in a mass that causes violation of the Groundwater Limitations.
- 7. Objectionable odors originating at the facility shall not be perceivable beyond the limits of the property owned by the Discharger.

8. All wastewater treatment, storage, and disposal facilities shall be designed, constructed, operated, and maintained to prevent inundation or washout due to floods with a 100-year return frequency.

#### C. Solids Disposal Specifications

Sludge, as used in this document, means the solid, semisolid, and liquid residues from the equalization tank and the package plant, including grease and biosolids.

- 1. Sludge shall be removed from WWTF system components as needed to ensure optimal operation and compliance with this Order.
- 2. Any on-site storage of sludge shall be temporary, and the waste shall be controlled and contained in a manner that minimizes leachate formation and precludes infiltration of waste constituents into soils.
- 3. Sludge shall be disposed of in a manner consistent with Title 27 and approved by the Executive Officer. Removal for further treatment, disposal, or reuse at a disposal site (i.e., landfill, WWTF, composting site, soil amendment site) operated in accordance with valid waste discharge requirements issued by a regional water quality control board will satisfy this specification.

#### D. Brine Disposal Specifications

Brine, as used in this document, means the liquid waste rejected by the reverse osmosis unit.

- 1. Any on-site storage of brine shall be temporary, and the waste shall be controlled and contained in a manner that precludes discharge of the waste to the ground surface and surface waters.
- 2. Brine shall be disposed of in a manner consistent with Title 27 and approved by the Executive Officer. Removal for further treatment or disposal at a disposal site (i.e., a publicly owned WWTF or Class II surface impoundment) operated in accordance with valid waste discharge requirements issued by a regional water quality control board will satisfy this specification.

#### E. Effluent Limitations

1. Effluent discharged into the injection wells shall not exceed the following limits:

Constituent	<u>Units</u>	Limitation
Total coliform organisms	MPN/100mL	<2.2 as a 7-day median
MS-2 coliphage	pfu <sup>1</sup>	None detected
рН	Std. units	6.5 minimum; 8.4 maximum

<sup>&</sup>lt;sup>1</sup> Plaque forming units.

#### F. Groundwater Limitations

Release of waste constituents from any system component associated with the wastewater treatment facility shall not cause groundwater under and beyond that system component (as determined by an approved well monitoring network) to contain any constituents in concentrations greater than ambient background conditions, and shall not cause or contribute to the violation of any Basin Plan narrative or numeric water quality objective.

#### G. Provisions

- 1. All of the following reports shall be submitted pursuant to Section 13267 of the California Water Code and shall be prepared as described by Provision G.2.
  - a. By **30 September 2005**, the Discharger shall submit documentation demonstrating that a certified wastewater treatment plant operator has been retained to perform all operation, maintenance, and routine monitoring of the wastewater treatment system.
  - b. By **30 September 2005**, the Discharger shall submit an *Alarm and Fail-Safe Systems Certification Report* that describes wastewater treatment and disposal system modifications that have been implemented to ensure that:
    - *i.* The wastewater system operator is immediately notified of any conditions that could lead to a spill or discharge of inadequately treated wastewater to the injection wells;
    - *ii.* Inadequately treated wastewater will be automatically re-routed for additional treatment prior to discharge to the injection wells; and
    - *iii.* The system is equipped with a back-up power supply or other positive means of assuring complete waste treatment and containment during power failures of any duration.
  - c. By **30 September 2005**, the Discharger shall submit an *Operation and Maintenance (O&M) Manual* for the wastewater treatment facility. The O&M Manual shall include complete descriptions, manufacturer's specifications, and recommended operation and maintenance procedures for all equipment, including pumps, blowers, motors, meters, valves, electrical controls and systems, filters, and any system component which requires inspection, testing, and/or maintenance to ensure compliance with this Order. The manual shall include specific inspection and maintenance procedures, recommended inspection and maintenance frequencies, system testing and troubleshooting procedures, and detailed operational procedures. It shall also include a copy of this Order, the Standard Provisions and Reporting Requirements, and monitoring/reporting procedures to ensure compliance with the Monitoring and Reporting Program. A copy of the O&M Manual shall be kept at the facility for reference by operating personnel. Key personnel shall be familiar with its contents.

- d. By **30 September 2005**, the Discharger shall submit an *Engineer's Operation, Maintenance* and *Monitoring Cost Estimate* for the wastewater treatment and disposal facility. Based on the plan and procedures set forth in the O&M Manual, the cost estimate shall include a detailed list of all work associated with operation, maintenance, and monitoring of the wastewater treatment and disposal system each year. The cost estimate shall include estimated expenditures for the certified operator; energy; equipment maintenance, repairs, and cyclical replacement; and system monitoring (both routine operational monitoring and monitoring and reporting required pursuant to the Monitoring and Reporting Program).
- e. By **30 September 2005**, the Discharger shall submit a *Groundwater Monitoring Well Installation Workplan*. The workplan shall describe the proposed installation of additional groundwater monitoring wells around the injection wells to allow evaluation of the groundwater quality upgradient and downgradient of the injection wells. In particular, there must be one monitoring well that is always upgradient or cross-gradient of the injection wells. Monitoring wells shall be constructed to yield representative samples from the uppermost layer of the uppermost aquifer and to comply with applicable well standards. The workplan shall be consistent with, and include the items listed in, the first section of Attachment C, which is attached hereto and made part of this Order by reference.
- f. By **30 January 2006**, the Discharger shall submit a *Groundwater Monitoring Well Installation Report* that describes the installation of groundwater monitoring wells and contains the items found in the second and third sections of Attachment C.
- g. By **30 March 2007**, the Discharger shall submit a *Background Groundwater Quality Study Report*. For each groundwater monitoring parameter/constituent identified in the MRP, the report shall present a summary of all monitoring data and calculation of the concentration in background monitoring well(s). Determination of background quality shall be made using the methods described in Title 27, Section 20415(e)(10), and shall be based on data from at least 12 consecutive monthly (or more frequent) groundwater monitoring events. For each monitoring parameter/constituent, the report shall compare the measured concentration in each compliance monitoring well with the proposed background concentration.
- h. Within 60 days of availability of community sewer service to the restaurant, the Discharger shall submit a report detailing a plan and schedule for connecting to the community sewer and decommissioning the on-site wastewater treatment plant and injection wells. The schedule for physical connection shall be no greater than 180 days.
- 2. All technical reports required herein that involve planning, investigation, evaluation, or design, or other work requiring interpretation and proper application of engineering or geologic sciences, shall be prepared by or under the direction of persons registered to practice in California pursuant to California Business and Professions Code sections 6735, 7835, and 7835.1. To demonstrate compliance with sections 415 and 3065 of Title 16, CCR, all technical reports must contain a statement of the qualifications of the responsible registered professional(s). As required by these laws, completed technical reports must bear the signature(s) and seal(s) of the registered professional(s) in a manner such that all work can be clearly attributed to the professional responsible for the work.

- 3. The Discharger shall comply with the Monitoring and Reporting Program No. \_\_\_, which is part of this Order, and any revisions thereto as ordered by the Executive Officer.
- 4. The Discharger shall comply with the "Standard Provisions and Reporting Requirements for Waste Discharge Requirements", dated 1 March 1991, which are attached hereto and made part of this Order by reference. This attachment and its individual paragraphs are commonly referenced as "Standard Provision(s)."
- 5. The Discharger shall provide certified wastewater treatment plant operators in accordance with Title 23 CCR, Division 3, Chapter 26.
- 6. If effluent or groundwater monitoring results show that the discharge is in violation of the Effluent and Groundwater Limitations then, within **60 days** of the request of the Executive Officer, the Discharger shall submit a report showing that degradation of the groundwater complies with SWRCB Resolution No. 68-16, i.e., that it is (a) in the best interest of the people of the state, (b) that best practical treatment and control measures have been implemented to reduce the amount of degradation, (c) that the groundwater degradation will not exceed applicable water quality objectives, and (d) that the degradation is confined within a specified boundary. If the Discharger cannot comply with Resolution No. 68-16 then, within **120 days** of request by the Executive Officer, the Discharger shall submit a workplan and timeline detailing the facility modifications that shall be implemented such that it complies with the Effluent and Groundwater Limitations of this Order.
- 7. As described in the Standard Provisions, the Discharger shall report promptly to the Regional Board any material change or proposed change in the character, location, or volume of the discharge.
- 8. Upon the reduction, loss, or failure of the sewer or wastewater treatment system resulting in a sewer overflow or wastewater spill, the Discharger shall take any necessary remedial action to (a) control or limit the volume of wastewater discharged, (b) terminate the discharge as rapidly as possible, and (c) recover as much as possible of the waste discharged (including wash down water) for proper disposal. The Discharger shall implement all applicable remedial actions including, but not limited to, the following:
  - a. Interception and rerouting of sewage flows around the sewage line failure;
  - b. Vacuum truck recovery of wastewater spills and wash down water;
  - Use of portable aerators where complete recovery of the sanitary sewer overflows and spills is not practicable and where severe oxygen depletion is expected in surface waters; and
  - d. Cleanup of sewage-related debris at the overflow site.
- 10. The Discharger shall report to the Regional Board any toxic chemical release data it reports to the State Emergency Response Commission within **15 days** of reporting the data to the Commission pursuant to section 313 of the "Emergency Planning and Community Right to Know Act of 1986."

- 11. The Discharger shall not allow pollutant-free wastewater to be discharged into the wastewater collection, treatment, and disposal system in amounts that significantly diminish the system's capability to comply with this Order. Pollutant-free wastewater means rainfall, groundwater, cooling waters, and condensates that are essentially free of pollutants.
- 12. The Discharger shall submit to the Regional Board on or before each compliance report due date, the specified document or, if appropriate, a written report detailing compliance or noncompliance with the specific schedule date and task. If noncompliance is being reported, then the Discharger shall state the reasons for such noncompliance and provide an estimate of the date when the Discharge will be in compliance. The Discharger shall notify the Regional Board in writing when it returns to compliance with the time schedule.
- 13. In the event of any change in control or ownership of land or waste discharge facilities described herein, the Discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be immediately forwarded to this office.
- 14. The Discharger must comply with all conditions of this Order, including timely submittal of technical and monitoring reports as directed by the Executive Officer. Violations may result in enforcement action, including Regional Board or court orders requiring corrective action or imposing civil monetary liability, or in revision or recession of this Order.
- 15. A copy of this Order shall be kept at the discharge facility for reference by operating personnel. Key operating personnel shall be familiar with its contents.
- 16. The Regional Board will review this Order periodically and will revise requirements when necessary.

I, THOMAS R. PINKOS, Executive Officer, do hereby certify the foregoing is a full, true, and correct
copy of an Order adopted by the California Regional Water Quality Control Regional Board, Central
Valley Region, on

THOMAS R. PINKOS, Executive Officer

ALO:7/21/2005